

Application No.: 10/719,739

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Docket No.: 245402008000  
Client Reference No.: 903239-01 (RH/in)REMARKS

Claims 1-18 are pending in the present application. By virtue of this response, no claims have been cancelled, and no new claims have been added. Accordingly, claims 1-18 are currently under consideration. Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented. No new matter has been added.

**Rejections under 35 USC § 103**

Claims 1-18 are rejected under 35 USC § 103(a) as allegedly being unpatentable over Saito et al. (U.S. Patent No. 6,121,634, herein after Saito) and Yoshida et al. (U.S. Patent No. 5,663,975, herein after Yoshida) both previously applied and further in view of Papayoanou (U.S. Patent No. 4,241,319, herein after Papayoanou), presently newly applied. Applicants respectfully traverse these rejections.

First, Applicants respectfully submit that there is no teaching or suggestion in any of the cited references to combine the teachings of Saito and Yoshida references with the Papayoanou reference to form the features of the present application. The Saito and Yoshida references teach a semiconductor light emitting device while the Papayoanou teaches a gas laser device. The gas laser of Papayoanou is a device of the 70's while the semiconductor light emitting devices of Saito and Yoshida are devices of the 90's. A person skilled in the art would consider the Papayoanou device belonging to a completely different technology class from the semiconductor light emitting devices of Saito and Yoshida, because of the differences in material, structure, mechanism of laser beam irradiation, application, and method of manufacturing. Neither the Papayoanou reference nor the Saito and Yoshida references discloses the motivation to combine the teachings of Papayoanou with the teachings Saito and Yoshida. For at least this reason, the obviousness rejection should be withdrawn.

In addition, Applicants respectfully submit that even if the teachings of the Saito and Yoshida references were combined with the teachings of Papayoanou reference, the combination

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does not teach or suggest the claimed elements of "wherein the p-electrode or the n-electrode is divided into at least two regions, and wherein all the regions of said p electrode or n electrode share the optical cavity." (Emphasis added) In the Office Action, the Examiner indicated that the Stark cell cavity 20 shown in Figure 2 (and Column 3, lines 21-25) of Papayoanou allegedly teaches the optical cavity of the present invention. Applicants respectfully disagree. As disclosed in Papayoanou, the Stark cell 20 "is filled with ammonia (NH<sub>3</sub>) or deuterated ammonia (NH<sub>2</sub>D) gas" and "the entire laser cavity includes the front mirror 16, the gas discharge section 12 or 14, end mirror 18, Stark cell 20 and grating 24." (See Papayoanou at Column 3, lines 1-3 and 14-16.) Although the Papayoanou reference uses the term "cavity", as described above, the meaning of cavity in Papayoanou is explicitly distinguished from the optical cavity of the present invention, where the present invention at least does not contain poisonous gas as in the Papayoanou device. Moreover in Papayoanou, "the Stark cell 20 of [being] is used only for occasional frequency tuning" (Emphasis added, see Papayoanou, Column 3, lines 61-62) while the optical cavity of the present invention is used as a resonator that emits a laser beam by resonance of light.

Furthermore, Papayoanou discloses that the channels 36 and 38 of Figure 6 correspond to electrodes 28 and 26 respectively. That is, there is a one-to-one correspondence of a "channel" and its respective pair of electrodes. It does not teach or suggest dividing an electrode into at least two regions and all the regions of the electrodes share the same optical cavity. The electrodes 26 and 28 of the gas laser are inside of the Stark cell cavity 20, (see Papayoanou, Column 3, line 45-52) which has clearly different structure than the nitride semiconductor light emitting device of the present invention.

For at least the reasons stated above, the combination of the Saito, Yoshida, and Papayoanou references does not teach or suggest at least the limitation of "wherein all the regions of said p electrode or n electrode share the optical cavity" of the independent claim 1 of the present application. It is respectfully submitted that the independent claim 1 and its corresponding dependent claims 2-18 are allowable over the cited prior art references.

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**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no: 245402008000. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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